Course Title:	Geometry B	
Common Core High School Geometry Standards		
Unit 8	**Right Triangle Trigonometry**	
Unit Objectives:	• Define trigonometric ratios • Name the three trigonometric functions and their side length ratios • Draw the two special right triangles and label their angles and sides • Explain how to solve for missing sides when given a special triangle • Solve problems involving right triangles, including special right triangles • Find missing angles using properties of the sine and cosine of complementary angles • Use trigonometric ratios and the Pythagorean Theorem to solve right triangles in applied problems	
Standards	**Assignment**	**Description**
G.SRT.6, G.SRT.7, G.SRT.8	8.1 - 8.4 Checkpoint Quiz	Graded Quiz
	8.5 - 8.7 Checkpoint Quiz	Graded Quiz
	Unit 8 DBA	Synchronous Discussion Based Assessment
	Unit 8 Test	Graded Test
	Unit 8 Project	End of Unit Project
Unit 9	**General Triangle Trigonometry**	
Unit Objectives:	• Derive the Laws of Sines and Cosines and use them to solve problems • Explain what information is needed to solve triangles using the Law of Sines • Explain what information is needed to solve triangles using the Law of Cosines • Apply the Laws of Sines and Law of Cosine to find unknown measurements in right and non-right triangles • Derive and apply the formula A=(½)ab sin(C) for area of a triangle • Explain the relationship between the Law of Cosines and the Pythagorean Theorem relative to a 90 degree angle	
Standards	**Assignment**	**Description**
G.SRT.9, G.SRT.10, G.SRT.11	9.1 - 9.2 Checkpoint Quiz	Graded Quiz
	9.3 - 9.5 Checkpoint Quiz	Graded Quiz
	Unit 9 DBA	Asynchronous Discussion Based Assessment
	Unit 9 Test	Graded Test
	Unit 9 Project	End of Unit Project
Unit 10	**Quadrilaterals**	
Unit Objectives:	• Identify and classify quadrilaterals • List the properties of parallelograms • Prove geometric theorems about parallelograms including using triangle congruence • Solve for missing angles, side lengths, and bisector lengths in parallelograms	

	● Use coordinates to solve for area and perimeter of polygons ● Explain how slope relates to classifying quadrilaterals ● Determine if quadrilaterals are rectangles in the coordinate plane	
Standards	**Assignment**	**Description**
G.CO.11, G.SRT.5, G.GPE.4, G.GPE.7	10.1 - 1.04 Checkpoint Quiz	Graded Quiz
	10.5 - 10.6 Checkpoint Quiz	Graded Quiz
	Unit 10 DBA	Asynchronous Discussion Based Assessment
	Unit 10 Test	Graded Test
	Unit 10 Project	End of Unit Project
Unit 11	**Circles**	
Unit Objectives:	● Prove all circles are similar to one another ● Identify and define parts of a circle ● Find arc lengths and areas of sectors of circles ● Calculate the measure of inscribed and circumscribed angles ● Explain the difference between circumscribed angles and inscribed angles in relationship to a circle ● Derive the equation of a circle ● Explain the steps required to convert any equation of a circle into standard form by completing the square ● Determine the center and radius of a circle and graph a circle ● Prove a point lies on or off a circle ● Describe real world objects in terms of the parts of circles	
Standards	**Assignment**	**Description**
G.C.1, G.C.2, G.C.5, G.MG.1, G.GPE.1	11.1 - 11.3 Checkpoint Quiz	Graded Quiz
	11.4 - 11.5 Checkpoint Quiz	Graded Quiz
	Unit 11 DBA	Asynchronous Discussion Based Assessment
	Unit 11 Test	Graded Test
	Unit 11 Project	End of Unit Project
Unit 12	**Circle Constructions**	
Unit Objectives:	● Solve for segment length of inscribed and circumscribed angles ● Convert angle measure between degrees and radians ● Construct inscribed and circumscribed circle of a triangle ● Construct a square, an equilateral triangle and a regular hexagon in a circle ● Construct a tangent line from a point outside the circle ● Derive the formula for arc length and area of a sector ● Solve modeling problems involving arc length and area of a sector ● Explain what a radian is and how it relates to a degree ● Define radians and determine how many degrees are in one radian	
Standards	**Assignment**	**Description**
G.C.2, G.C.3, G.C.4, G.C.5, G.GPE.2, G.CO.13	12.1 - 12.2 Checkpoint Quiz	Graded Quiz
	12.3 Checkpoint Quiz	Graded Quiz
	12.4 Checkpoint Quiz	Graded Quiz

	12.4 - 12.5 Checkpoint Quiz	Graded Quiz
	Unit 12 DBA	Asynchronous Discussion Based Assessment
	Unit 12 Test	Graded Test
	Unit 12 Project	End of Unit Project
Unit 13	**Volume**	
Unit Objectives:	● Identify volume formulas and use them to solve problems ● Identify cross-sections from three-dimensional objects and shapes from two-dimensional rotations ● Derive the equation of a parabola	
Standards	**Assignment**	**Description**
G.GMD.3, G.GMD.4, G.GPE.2	13.1 -13.3 Checkpoint Quiz	Graded Quiz
	13.4 - 13.5 Checkpoint Quiz	Graded Quiz
	Unit 13 DBA	Asynchronous Discussion Based Assessment
	Unit 13 Test	Graded Test
	Unit 13 Project	End of Unit Project
Unit 14	**Modeling in Two and Three Dimensions**	
Unit Objectives:	● Identify and apply area and volume formulas ● Explain the steps for solving modeling problems ● Solve problems by applying Cavalieri's Principle ● Explain Cavalieri's Principle ● Identify three-dimensional solids that can be used to model real world objects ● Solve modeling problems involving the volume of cylinders ● Solve modeling problems by applying concepts of density based on volume ● Solve problems using dissection arguments	
Standards	**Assignment**	**Description**
G.MG.1, G.MG.2, G.GMD.1	Checkpoint Quiz	Graded Quiz
	Checkpoint Quiz	Graded Quiz
	Unit 14 DBA	Synchronous Discussion Based Assessment
	Unit 14 Test	Graded Test
	Unit 14 Project	Unit Project